CSC236 Fall 2016

More Practice 10

- **Example 90.** Let $\sum = \{a, b\}$. Can we devise an FSA to recognise only all strings in which the number of a's is equal to number of b's? If yes, draw it. If no, why?

- **Example 91.** Let $\sum = \{0,1\}$. Can we devise an FSA to recognise only all strings that are palindrome? If yes, draw it. If no, why?

- **Example 92.** Prove the FSA that you devised in Example 87, here, is correct.

- **Example 93.** Prove the FSA that you devised in Example 88, here, is correct.

- **Example 94.** Let $\sum = \{0,1\}$. Devise an FSA to recognize only all strings that their 2nd last symbol is 0. Prove your FSA is correct.

- **Example 95.**

  A) **Intuitively** devise an FSA to recognize $L_{87} \cap L_{88}$.

  B) **Systematically** devise an FSA to recognize $L_{87} \cap L_{88}$, use the approach proposed here.

Note $L_{95} = \{\omega \in \{a, b\}^* \mid \omega$ has even number of b's and the number of b's is a multiple of $3\}$